

ASSAY METHODS FOR CYCLIN DEPENDENT KINASES**Abstract of the Disclosure**

5 Disclosed herein are novel methods for measuring the activity of one or more cyclin dependent kinases (CDKs) in a sample, based upon the quantitation of CDK-phosphorylated Rb protein. The method for measuring cyclin-dependent kinase (CDK) activity includes the following: i) contacting the sample with an anti-retinoblastoma protein (Rb) capture antibody that specifically recognizes a CDK-phosphorylated Rb and isolating the capture antibody-Rb complex; ii) contacting the capture antibody-Rb complex with an anti-Rb primary antibody and isolating the capture antibody-Rb-primary antibody complex; and iii) measuring the amount of CDK-phosphorylated Rb in the sample by quantitating the primary antibody present in the capture antibody-Rb-primary antibody complex. These methods may be used to assess intracellular CDK activity in cultured cells or in cells taken from an animal. Also disclosed are methods of identifying an agent that modulates the CDK activity.

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